2016
Major Automated Information System
Annual Report

Joint Space Operations Center (JSpOC) Mission System Increment 3 (JMS Inc 3)

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Common Acronyms and Abbreviations for MAIS Programs

Acq O&M - Acquisition-Related Operations and Maintenance
ADM - Acquisition Decision Memorandum
AoA - Analysis of Alternatives
ATO - Authority To Operate
APB - Acquisition Program Baseline
BY - Base Year
CAE - Component Acquisition Executive
CDD - Capability Development Document
CPD - Capability Production Document
DAE - Defense Acquisition Executive
DoD - Department of Defense
DoDAF - DoD Architecture Framework
FD - Full Deployment
FDD - Full Deployment Decision
FY - Fiscal Year
IA - Information Assurance
IATO - Interim Authority to Operate
ICD - Initial Capability Document
IEA - Information Enterprise Architecture
IOC - Initial Operational Capability
IP - Internet Protocol
IT - Information Technology
KPP - Key Performance Parameter
$M - Millions of Dollars
MAIS - Major Automated Information System
MAIS OE - MAIS Original Estimate
MAR – MAIS Annual Report
MDA - Milestone Decision Authority
MDD - Materiel Development Decision
MILCON - Military Construction
MS - Milestone
N/A - Not Applicable
O&S - Operating and Support
OSD - Office of the Secretary of Defense
PB - President’s Budget
RDT&E - Research, Development, Test, and Evaluation
SAE - Service Acquisition Executive
TBD - To Be Determined
TY - Then Year
U.S.C- United States Code
USD(AT&L) - Under Secretary of Defense for Acquisition, Technology, & Logistics

Program Information

Program Name

Joint Space Operations Center (JSpOC) Mission System Increment 3 (JMS Inc 3)

DoD Component

Air Force

Responsible Office

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References

MAIS Original Estimate

This investment does not have an approved program baseline; therefore, no Original Estimate has been established.

Program Description

The Joint Space Operations Center (JSpOC) Mission System (JMS) program will provide a Service Oriented Architecture (SOA) and net-centric collaborative information environment at the Unclassified, Secret, Top Secret/Sensitive Compartmented Information, and Special Access Program levels. Efforts incorporate net-centric enterprise services and integrated incremental space mission applications services. The effort integrates components of Space Situational Awareness (SSA) mission applications and Command and Control (C2) capabilities into the JSpOC to create timely, actionable knowledge necessary for maintaining space superiority and exercising C2 of space forces.

Mission applications will provide space services to enhance the accuracy, sustainability, and responsiveness of space surveillance capabilities by providing the knowledge environment necessary to enable the Commander, Joint Functional Component Command (JFCC) Space, to make rapid, responsive decisions for the protection of space assets from proliferating threats (adversary as well as orbiting debris).

JMS Increment-1 provided the foundational infrastructure, service oriented architecture, and user-defined operational picture.

JMS Increment-2 built upon the Increment-1 infrastructure to deliver the bulk of operator and analyst capabilities required to transition off the legacy JSpOC C2 infrastructure. Provides a transition path from the legacy SPADOC system, which has 75% of its component beyond end-of-life or end-of-service, and the majority of its software is no longer vendor supported. JMS Increment-2 improves SSA and related support to the war fighters and civil interests by delivering systems that can handle the much great data volume provided by modern sensors, and enable data sharing and collaboration through net-centric SOAs.

JMS Increment 3 will provide the mission applications to deliver a robust, responsive Battle Management Command, Control and Communications that allows JFCC SPACE to meet emerging threats. These applications will include, but are not limited to, providing the ability to aggregate intelligence data from various user-defined sources and automatically generating alerts, provide an integrated operating picture for radio frequency spectrum, and create an interactive modeling and simulation environment to support training and exercises, collaborative data sharing, and Course of Action development and assessment. Funding includes technical studies, development, integration and related support costs.

Business Case

Business Case Analysis, including the Analysis of Alternatives (AoA): Key functional requirements for this program were defined in the North American Aerospace Defense Command/United States Space Command Warfighting Support System Mission Need Statement, May 18, 1998 (Joint Requirements Oversight Council Memorandum (JROCM 062-98)) and the Combatant Commanders Integrated Command and Control System Operational Requirements Document, January 20, 2004 (JROCM 008-04), which serve as the Initial Capabilities Document for Space Command and Control (C2). A Space C2 AoA was completed on February 25, 2008.

The program was separated into multiple increments. Increment 3 is a new start in FY 2016.

For JMS Increment 3, Air Force Requirements Oversight Council approved several new KPPs to initiate a JROC approval cycle. These KPPs were derived from existing Increment 2 Key System Attributes/Other System Attributes. These new KPPs include:

1. Threat Identification & Warning
2. Spectrum Common Operating Picture
3. Modeling & Simulation/Course of Action (COA) Development

In addition, an Extensible Battle Management, Command, Control and Communications Framework to facilitate end-to-end mission planning and COA execution within adversary timelines is one of the deliverables. This framework supports integration of other Command, Control and Communications Mission Systems.

Firm, Fixed-Price Feasibility: The Increment 3 MDA will determine whether the program will continue with the current acquisition approach which uses a combination of fixed-price and cost-type contracts managed by a government integrator.

Independent Cost Estimate: An Increment 3 Program Office Estimate will be produced along with an Air Force Cost Analysis Agency-approved Service Cost Position. These will be reviewed by Cost Assessment and Program Evaluation as part of an independent cost assessment in support of an MDA Milestone B decision anticipated in FY 2017.

Certification of Business Case Alignment; Explanation: A business case for JMS Inc 3 has not yet been completed, thus it is premature to certify that the technical and business requirements have been reviewed and validated to ensure alignment with the business case.

Program Status

No Baseline: This Automated Information System Investment has not yet been baselined. The information provided herein is appropriate to the current status of the program. No Original Estimate is being established by this report. The program is projected to be baselined in 4th Quarter FY 2017. FY 2016 plans include requirements development, technical maturation studies, risk reduction efforts, and market research.

Schedule

This investment does not have an approved program baseline. Therefore, the information provided here does not constitute an Original Estimate.

Memo

Multiple Service Packs will be delivered estimated in FY 2019 through FY 2021.

Performance

This investment does not have an approved program baseline. Therefore, the information provided here does not constitute an Original Estimate.

Performance Characteristics	
Development Objective/Threshold	
KPP #6 - Threat Identification and Warning	
The System shall: Perform Threat Identification and Notification, SIPOE, and Indications and Warnings.	(T=O) The System shall: Perform Threat Identification and Notification, SIPOE, and Indications and Warnings.
KPP #7 - Spectrum Common Operational Picture	
The System shall: Perform Environmental Effects Assessment and Forecast, Identification of Laser and Radio Frequency Emissions, and Identification of Space System Safety Risk.	(T=O) The System shall: Perform Environmental Effects Assessment and Forecast, Identification of Laser and Radio Frequency Emissions, and Identification of Space System Safety Risk.
KPP #8 - Modeling and Simulation/Course of Action Development	
The System shall: Perform Exercises and Testing, Distributed SSA Analysis, Master Space Plan JSTO Development, and SSA Event Forecasting and Prediction.	(T=O) The System shall: Perform Exercises and Testing, Distributed SSA Analysis, Master Space Plan JSTO Development, and SSA Event Forecasting and Prediction.

Memo

Joint Requirements Oversight Council Memorandum 050-15, dated July 30, 2015 approved three KPPs for JMS Inc 3.

Acronyms and Abbreviations

JSTO - Joint Space Tasking Order
SIPOE - Space Intelligence Preparation of the Operational Environment
SSA - Space Situational Awareness

Funding

This investment does not have an approved program baseline. Therefore, the information provided here does not constitute an Original Estimate. The following funding data is extracted from the FY 2017 President's Budget documentation.

JMS Inc 3				
Fiscal Year	**RDT&E (TY $M)**	**Procurement (TY $M)**	**MILCON (TY $M)**	**Acq O&M (TY $M)**
2016	12.4	0.0	0.0	0.0
2017	24.9	0.0	0.0	0.0
2018	62.8	0.0	0.0	0.0
2019	65.4	0.0	0.0	0.0

1. $48.0M in FY 2017 RDT&E funding was moved from JMS Inc 3 to JMS Inc 2 due to Inc 2 schedule slip.